EPA Region 5 Records Ctr.

# Republicsteel

Republic Steel Corporation Chicago District
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November 5, 1981

CERTIFIED MAIL RECEIPT #770380

R McConnachie District Manager

Mr. Daniel Goodwin Manager Air Pollution Control Illinois Environmental Protection Agency 2200 Churchill Road Springfield, IL 62706

NOV Q.2 1981

MERA-DAPC.CO.

Re: Republic Steel Chicago District Air Emission Compliance Plan

Dear Mr. Goodwin:

Legal and technical representatives of Republic and the Illinois Environmental Protection Agency met in Chicago on November 3, 1981, to discuss resolution of certain outstanding issues regarding the compliance program for sources of particulate emissions at Republic's Chicago District plant. We believe that this meeting was quite productive, and that it resolved all outstanding issues regarding Republic's compliance program. At the request of Messrs. Levine and Orlinsky, we are submitting to you a statement of the compliance program which will bring all sources at the Chicago District into compliance with applicable regulations by December 31, 1982. We trust that this statement is in accordance with the understandings reached with your staff at the November 3, 1981 meeting.

#### I. BLAST FURNACE CAST HOUSE

Republic has now completed the installation of its covered runner program which includes covers for the iron trough, the iron runner and the slag runner, all of which is more fully illustrated on the attached diagram marked Exhibit 1. This program is serving to reduce particulate emissions from the cast house to levels superior to those reported in the results of the February 1980, and January 1981 tests.

The diagram shows the cover sections and their relative arrangement. The first section of the iron trough cover is removed when the tap hole is drilled, as well as at the end of the cast to allow the mudgun to swing into place to plug the tap hole. A hoisting device, which is mounted on a monorail that traverses the iron trough, handles this movement. Note that a typical cross-sectional view through a runner, showing the coverto-runner fit, is also shown on the attached diagram.

Emission tests conducted by Republic on the Chicago blast furnace cast house on March 24 and 25, 1981 (hereafter "the March 1981 test") substantiate the additional reduction of particulate emissions attributable to the covered runners at the cast house. The test procedure which was used for the March 1981 test of the covered runners was the same as that used for the January 1981 compliance test. The furnace operation logs and field data sheets for the March 1981 test are being sent to Sy Levine under separate cover, as he requested.

Presently, Republic is in the process of refining operating practices using the covered runners. We expect to be operating normally by about December 1, 1981 at which time we will contact Illinois EPA representatives to arrange for a visit to observe the system in operation.

#### II. Q-BOP FACILITY

Republic will conduct a test for particulate emissions from the Q-BOP to demonstrate compliance during single fan operation in accordance with the test procedure agreed upon by Republic and the Illinois EPA. This test is scheduled to begin by December 1, 1981, and will take approximately three weeks to complete. A test report will be submitted to the Illinois EPA by February 1, 1982.

If the results of the test do not support Republic's position that the Q-BOP facility is in compliance with applicable regulations during single-fan operation, Republic plans to utilize emission reductions attributable to the covered runner program at the blast furnace cast house as a basis for seeking a "bubble" variance for the Q-BOP. We believe that the results of the March 1981 test of the covered runner system (see above) demonstrate that particulate emissions from the cast house are now sufficiently below the allowable level to clearly provide offsetting credits for any excess emissions during single fan operation of the Q-BOP. If a bubble variance is required, Republic will submit an appropriate application for such variance by February 1, 1982.

## III. 44" MILL HOT SCARFER

Republic plans to also utilize the emission reductions attributable to the covered runner program at the blast furnace cast house as a basis for a "bubble" variance for the 44" mill hot scarfing machine. We believe that the reduction in particulate emissions from the cast house due to the covered runners are sufficient to also provide offsetting credits for the minimal level of any excess emissions from the scarfing machine. Republic will submit an appropriate application for this bubble variance, along with the bubble variance application for the Q-BOP if one is required, by February 1, 1982.

#### IV. BLAST FURNACE DUST CATCHER

Republic will complete installation of the dust handling equipment shown on the attached five pages of sketches marked "Exhibit 2" by December 31, 1981, to eliminate any question of compliance for this operation.

# V. ELECTRIC FURNACE SHOP

The existing baghouse of the primary control system and the electrostatic precipitator (ESP) of the secondary control system, as operated in accordance with established operating practices approved by the Illinois EPA, establishes compliance of the electric furnace shop with applicable regulations.

Representatives of the Illinois EPA have indicated that, on occasion, visible secondary emissions have been observed, which they believe are attributable to Republic's failure to adequately follow the established operating practices. To avoid any question about this, Republic will re-emphasize the importance of following these operating practices during all phases of electric furnace operation.

Representatives of the Illinois EPA have not been present to observe visible emissions during ladle lancing. This is because ladle lancing is an infrequent practice which is performed only rarely to remove skulls in the ladle. Emissions from this operation are captured by the ESP of the secondary control system and therefore the ladle lancing is in compliance with applicable regulations.

Republic will provide Illinois EPA representatives with as much advance notice of the next ladle lancing operation as conditions permit to enable them to observe the process. It should be noted that we can provide no more than approximately one hour advance notice because of the necessity to lance the ladle before the skull cools.

## VI. MELT SHOP RELADLING STATION

Emissions from this operation are captured by an independent hood connected by ductwork to the ESP of the secondary control system associated with the electric furnaces and therefore this operation is in compliance with applicable regulations.

# VII. SLAG POT DUMPING

Emissions from this operation are captured by the ESP of the secondary control system associated with the electric furnaces and therefore this operation is in compliance with applicable regulations.

## VIII. FUGITIVE DUST CONTROL PLAN

Republic's fugitive dust control plan, which was submitted to Sy Levine of the Illinois EPA on May 2, 1980, is being implemented in accordance with the schedules set forth therein.

## IX. COKE PLANT

The existing coke plant will be permanently shut down and the new battery is scheduled to begin operation during the week of December 6, 1981. We will provide required emission data on the new battery as soon as practicable after start-up.

We appreciate the cooperation shown by your staff in resolving these issues and we look forward to a productive working relationship as we complete implementation of this program over the coming months.

Very truly yours,

Robert McConnachie District Manager

RMcC:mlb

att.